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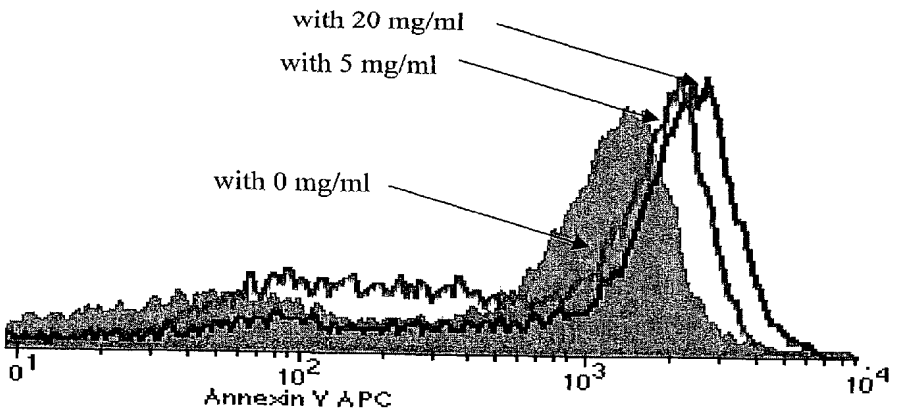
(54) Title: PHOSPHORYLCHOLINE CONJUGATES AND CORRESPONDING ANTIBODIES



(57) Abstract: IgG and IgM autoantibody levels against phosphorylcholine in subjects with hypertension (diastolic pressure >95 mmHg) were determined at baseline in order to determine the importance of antibodies for the development of atherosclerosis. The results show that increases in intima-media thickness (IMT) at a follow-up four years after baseline were significantly less prevalent in subjects having high autoantiboides particularly high IgM autoantibodies, to phosphorylcholine. The presence or absence of autoantibodies, particularly IgM autoantibodies, against phosphrylcholine is thus related to an increased or decreased risk of developing ischemic cardiovascular diseases. A method to determining antibodies, particularly IgM antibodies, toward phosphorylcholine is proposed in this invention to identify subjects at risk of developing ischemic cardiovascular diseases. Animal experiments show that medium to high levels of antibodies, particularly IgM antibodies, can be detected in plasma after active immunization with a keyhole limpet hemocyanin (KLH-phosphorylcholine conjugate. A pharmaceutical composition comprising a phosphorylcholine conjugate (active immunization) or an antibody preparation, for example a monoclonal antibody, with specificity to a phosphorylcholine conjugate (passive immunization) is proposed and the use of these compositions as active or passive immunogen is the treatment or prevention of atheroscleoris.

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